

# HANGOVER

WIRELESS HELMET LIGHT

Instruction Manual

**OL** OUTBOUND LIGHTING

## MOUNTING YOUR LIGHT

- Hangover uses a standard action camera mount so it is compatible with a variety of mounting options. Included is a curved mount with a 3M adhesive designed to attach to most bike helmets.
- To apply action camera adhesive mounts please follow these 3 steps:
  1. Apply the mount to a smooth, and fully cleaned surface.
  2. Firmly press the mount into place ensuring full contact over the entire surface.
  3. Be sure to apply the mount at room temp, and also allow at least a few hours for the mount to properly adhere to the surface

**NOTE:** The light works best when positioned as close to the center of your helmet as possible. This centers the weight over your head and makes it less likely to be noticed on your helmet.

## ADJUSTING THE ANGLE OF YOUR LIGHT

When mounted, manually rotate the light up or down. Then tighten the thumbscrew when you are satisfied with the aim.



## INSTALLING YOUR LIGHT ON THE MOUNT

- ① Align the light foot with the base mount
- ② Push the light forward into the mount and it will snap into place
- ③ Adjust the angle to your liking, and tighten down the thumbscrew.

## REMOVING THE LIGHT

**Compress the wing tabs** until the mount becomes loose and slide it back and out of the base.



## CHARGING YOUR BATTERY






- Hangover comes with a customized USB-C to USB-A cable to allow for charging with common USB-A charging ports. The light can be charged rapidly with compatible Quick Charge 3.0A chargers.
- The light will reach 85% charge in around one hour, after which the battery will begin to taper charge current due to the inherent properties of Li-ion batteries and will trickle charge to finish.
- The status light animation speed will indicate if being Quick Charged or at a normal rate. When first plugged in it will be a slow animation, if QC is enabled the animation will speed up significantly.
- When fully charged all 4 status lights will remain fully lit.
- If you do manage to run the light until it is completely dead, the main beam will flash for 10 seconds prior as a safety feature so that you have time to slow down and stop safely, rather than having the light just go black without warning.

## EXTERNAL BATTERY CHARGING

- This light is capable of pass-thru charging, meaning that it can be charged while in-use on the trail if you need even longer runtime.












- To maximize additional runtime, use a power bank capable of 3.0A output at 5V and plug in pack at start of ride. Do not wait until the light is completely drained to attach the supplemental battery or all modes may not be available
- CAUTION: Using a power bank that does not meet QC3.0 specifications can lead to undesired operation and should be verified prior to use. Refer to our website for more information.

## STATUS LIGHTS AND BATTERY PERCENTAGE

	MEANING	% LEFT
	FULLY CHARGED	100%
	PLENTY TO GO	75%
	KEEP AN EYE ON IT	50%
	NO REALLY, PAY ATTENTION	25%
	HEAD HOME BUD (SLOW FLASH)	5%
	ALRIGHT I'M OUT (RAPID FLASH)	2%

## POWER ON & MODES

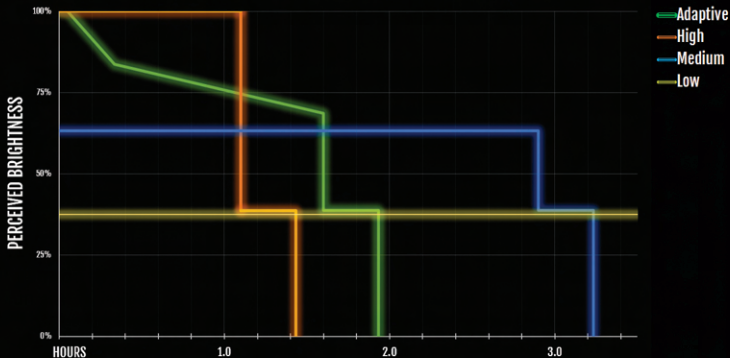
- Single click will turn on the light and default to **ADAPTIVE**.
- Hold button for **more than 1 second** to turn off.
- **Strobe and Pulse modes** are turned on by holding the power button **FROM OFF** for more than 3 seconds.

CYCLES	STATUS LIGHT	MODE	RUN TIME
CLICK 		ADAPTIVE	1.6h
 CLICK 		HIGH	1.1h
CLICK 		MEDIUM	2.9h
CLICK 		LOW	9.5h
HOLD (3 sec) 		DAYTIME STROBE NIGHTTIME PULSE	6.5h 3.0h

# RUNTIME

Single number reports of runtime are usually misleading and ineffective when actually planning your ride. So here is the expected runtime of each mode on Trail Evo. This is from 100% full charge.

## EXPECTED HANGOVER RUNTIME PERFORMANCE



## HOW TO GET THE MOST OUT OF YOUR NEW LIGHT

- Everyone is different and has different riding styles. To help you get the most out of your light in terms of runtime and performance, we've put together a few quick tips for the more common types of rides.

### CROSS COUNTRY/MTB

- Your local rides tend to be fast and flowing with enough changes in terrain you don't want to be adjusting your light levels every 30 seconds while rolling around. Just set it and forget it.
- Adaptive mode (Setting #1) is perfect for this as it starts bright while your eyes adjust the darkness, then gradually dims so slowly that it is difficult to notice, but it drastically increases your runtime so you can get a nearly 2 hour ride in without touching the light.

### ENDURO

- Your local rides tend to have a long, slow climb up the hill, followed by a fast descent.
- Turn your light to Low (Setting #4) for the slow climbing to conserve battery where you don't need to see 300ft down the trail, then when before you start the descent crank it up to High (Setting #2) to ensure 100% max output for the entire descent for maximum visibility.



## COMMUTING / ROAD

- Sometimes you may have to ride on the road a little bit to get to trails. For safety, always use a light, day or night, to ensure drivers can see you.
- The Daytime Strobe mode uses a triple-blink sequence to be highly visible during daylight hours when it is bright outside. Click to cycle to Nighttime Pulse mode that uses a smoother up/down ramp to increase visibility without blinding drivers' eyes at night with harsh flashes.

## FATBIKING

- Your local rides tend to be slower through the woods where bright, white snow is all around to reflect light.
- Medium (Setting #3) gives you a solid almost 3 hours of runtime with enough light since you don't need to see nearly as far down the trail, as well as the environment tends to be highly reflective so everything looks brighter.

**HAPPY RIDING!**



# THANK YOU FOR YOUR PURCHASE!

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As you know, we are a very small company working to make the best bike-specific lights that we can. While we strive for 100% reliability we know that sometimes issues can happen. Please contact us if there are any problems so we can get you taken care of, and so we can determine how to prevent the issue in the future!

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